



PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,905

DATE: 12/11/2002

TIME: 14:13:11

Input Set : A:\SEQLISTVANM190001APC.TXT

Output Set: N:\CRF4\02112003\I743905.raw

4 <11> * APPLICANT: Lusher, R.
 5 Shilley, Hubert
 6 Richards, Ken
 7 Jonard, Gerard
 9 <120> TITLE OF INVENTION: METHOD OF GENETIC MODIFICATION OF A WILD
 10 TYPE VIRAL SEQUENCE
 12 <130> FILE REFERENCE: VANM190.001APC
 14 <140> CURRENT APPLICATION NUMBER: US 09/743,905
 C--> 15 <141> CURRENT FILING DATE: 2002-03-19
 17 <150> PRIOR APPLICATION NUMBER: EP 98870159.5
 18 <151> PRIOR FILING DATE: 1998-07-10
 20 <150> PRIOR APPLICATION NUMBER: PCT BE99/00089
 21 <151> PRIOR FILING DATE: 1999-07-09
 23 <160> NUMBER OF SEQ ID NOS: 6
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 399
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Artificial Sequence
 32 <220> FEATURE:
 33 <223> OTHER INFORMATION: genetically modified TGB-3 viral sequence
 W--> 35 <221> NAME/KEY: CDS
 36 <222> LOCATION: (1)...(399)
 W--> 38 <400> 1

ENTERED

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39 atg gta att gag att cca gta gct tta tct aat att gta tta tac ata      48
40 Met Val Leu Val Val Ala Val Ala Leu Ser Asn Ile Val Leu Tyr Ile
41      1          5          10          15
43 ggt aac ggt tat att att gtc agt atc tgg tac tca cag ttt ttc aac      96
44 Val Ala Gly Cys Val Val Val Ser Met Leu Tyr Ser Pro Phe Phe Ser
45      20          25          30
47 aac aat att aac aac tgc tgc aac tat tcc gaa gaa att ttt aac aac aac      144
48 Asn Asp Val Lys Ala Ser Ser Tyr Ala Gly Ala Ile Phe Lys Gly Ser
49      35          40          45
51 att ggt att ata aac aac aat tct ttt aat taa att gtt aat ttt aat      192
52 Gly Cys Ile Met Asp Arg Asp Phe Ala Glu Phe Gly Ser Cys Asp
53      50          55          60
55 att gaa taa att ata ttt ttt ttt ttt ttt ttt ttt ttt ttt ttt ttt      240
56 Ile Trp Lys His Val Ala His Ser Ile Thr Lys Val Ala Thr Lys His
57      65          70          75
59 ttt aat att att att att att att att att att att att att att att      288
60 Ser Asp Val Asp Ile Met Val Lys Arg Lys His Val Thr Val Arg Val
61      80          85          90
63 ttt att ttt att att att att att att att att att att att att att      336
64 Thr Leu Thr Ser Ile Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr
  
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,905

DATE: 02/11/2003

TIME: 14:03:10

Input File : A:\SEQLISTVANM190001APC.TXT

Output File : N:\CRF4\02112003\I743905.raw

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64 Val Thr Leu Thr Glu Thr Ile Phe Ile Ile Leu Ser Arg Leu Phe Gly
65      100      110      115
66 att ggg ggt gtt ttt ttt ttt atg ata ttt tta atg tct ata att tga ttt      124
67 Leu Ala Val Phe Leu Phe Met Ile Cys Leu Met Ser Ile Val Trp Phe
68      115      120      125
69 tgg tat tat aga taa      131
70 Trp Tyr His Arg
71      130

```

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72 <210> SEQ ID NO: 1
73 <211> LENGTH: 132
74 <212> TYPE: PRP
75 <213> ORGANISM: Artificial Sequence
81 <220> FEATURE:
82 <223> OTHER INFORMATION: genetically modified TGB-3 viral sequence
84 <400> SEQUENCE: 2

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85 Met Val Leu Val Val Ala Val Ala Leu Ser Asn Ile Val Leu Tyr Ile
86 1      5      10      15
87 Val Ala Gly Cys Val Val Val Ser Met Leu Tyr Ser Pro Phe Phe Ser
88      20      25      30
89 Asn Asp Val Lys Ala Ser Ser Tyr Ala Gly Ala Ile Phe Lys Gly Ser
90      35      40      45
91 Gly Cys Ile Met Asp Arg Asn Ser Phe Ala Gln Phe Gly Ser Cys Asp
92      50      55      60
93 Ile Pro Lys His Val Ala Glu Ser Ile Thr Lys Val Ala Thr Lys Glu
94      65      70      75      80
95 His Asp Val Asp Ile Met Val Lys Arg Gly Glu Val Thr Val Arg Val
96      85      90      95
97 Val Thr Leu Thr Glu Thr Ile Phe Ile Ile Leu Ser Arg Leu Phe Gly
98      100      105      110
99 Leu Ala Val Phe Leu Phe Met Ile Cys Leu Met Ser Ile Val Trp Phe
100      115      120      125
101 Trp Tyr His Arg
102      130

```

```

103 <210> SEQ ID NO: 3
104 <211> LENGTH: 399
105 <212> TYPE: DNA
106 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: genetically modified TGB-3 viral sequence

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W--> 113 <221> NAME/KEY: CDS

114 <222> LOCATION: (1)...(399)

W--> 116 <400> 3

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117 att gtc att ggg ggt gaa gta gaa gta tct gaa gaa gta ttc taa gta      40
118 Met Val Leu Val Val Lys Val Asp Leu Ser Asn Ile Val Leu Tyr Ile
119 1      5      10      15
120 att ggt gtt gtt gtt gtt gtt gtt gtt gtt gtt gtt gtt gtt gtt gtt      20
121 Val Ala Gly Cys Val Val Val Ser Met Leu Tyr Ser Ile Ile Phe Phe
122      25      30      35
123 att att att att att att att att att att att att att att att att      40

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,905

DATE: 05/11/2003

TIME: 14:03:11

Input Seq : A:\SEQLISTVANM190001APC.TXT

Output Seq : N:\CRF4\02112003\I743905.raw

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126 Asn Asp Val Lys Ala Ser Ser Tyr Ala Gly Ala Ile Phe Lys Gly Ser
127      35      40      45
128 ggt ggt att gta ggt ggt ggt ggt ggt ggt ggt ggt ggt ggt ggt 14
129 Gly Cys Ile Met Ala Ala Asn Ser Phe Ala Gln Phe Gly Ser Cys Asp
130      50      55      60
131 att gaa gaa gaa gaa gaa gaa gaa gaa gaa gaa gaa gaa gaa gaa 14
132 Ile Phe Lys His Val Ala Gln Ser Ile Thr Lys Val Ala Thr Lys Gln
133      65      70      75      80
134 gaa gat gtt gaa ata gta gta gaa gaa gaa gaa gaa gaa gaa gaa 14
135 His Asp Val Asp Ile Met Val Lys Arg Gly Gln Val Thr Val Arg Val
136      85      90      95
137 gtt gct gaa gaa gaa gaa gaa gaa gaa gaa gaa gaa gaa gaa gaa 14
138 Val Thr Leu Thr Glu Thr Ile Phe Ile Ile Leu Ser Arg Leu Phe Gly
139      100      105      110
140 ttg ggg gtt gtt ttt ttg ttc atg ata tgt tta atg tct ata gtt tgg ttt 384
141 Leu Ala Val Phe Leu Phe Met Ile Cys Leu Met Ser Ile Val Trp Phe
142      115      120      125
143 tgg tat cat aga taa
144 Trp Tyr His Arg *
145      130
146 <210> SEQ ID NO: 4
147 <211> LENGTH: 132
148 <212> TYPE: PRT
149 <213> ORGANISM: Artificial Sequence
150 <220> FEATURE:
151 <223> OTHER INFORMATION: genetically modified TGB-3 viral sequence
152 <400> SEQUENCE: 4
153 Met Val Leu Val Val Lys Val Asp Leu Ser Asn Ile Val Leu Tyr Ile
154      1      5      10      15
155 Val Ala Gly Cys Val Val Val Ser Met Leu Tyr Ser Pro Phe Phe Ser
156      20      25      30
157 Asn Asp Val Lys Ala Ser Ser Tyr Ala Gly Ala Ile Phe Lys Gly Ser
158      35      40      45
159 Gly Cys Ile Met Ala Ala Asn Ser Phe Ala Gln Phe Gly Ser Cys Asp
160      50      55      60
161 Ile Phe Lys His Val Ala Gln Ser Ile Thr Lys Val Ala Thr Lys Gln
162      65      70      75      80
163 His Asp Val Asp Ile Met Val Lys Arg Gly Gln Val Thr Val Arg Val
164      85      90      95
165 Val Thr Leu Thr Glu Thr Ile Phe Ile Ile Leu Ser Arg Leu Phe Gly
166      100      105      110
167 Leu Ala Val Phe Leu Phe Met Ile Cys Leu Met Ser Ile Val Trp Phe
168      115      120      125
169 Trp Tyr His Arg
170      130
171 <210> SEQ ID NO: 5
172 <211> LENGTH: ***
173 <212> TYPE: CNA
174 <213> ORGANISM: Artificial Sequence

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,905

DATE: 12/11/2003

TIME: 14:13:17

Input File : A:\SEQLISTVANM190001APC.TXT

Output File : N:\CRF4\02112003\I743905.raw

188 <220> FEATURE:

189 <221> OTHER INFORMATION: genetically modified TGE-3 viral sequence

W--> 191 <221> NAME/KEY: CDS

192 <222> LOCATION: (1)...(132)

W--> 194 <400> 5

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195 atg aac cat gta gta aaa gta gat tta tta aat att gta tta tac ata 47
196 Met Val Leu Val Val Lys Val Asp Leu Ser Asn Ile Val Leu Tyr Ile
197 1 5 10 15
198 gtt ggt ggt ggt gtt gtt gta agt atg tta tac tca aag ttt ttc agc 48
199 Val Ala Gly Cys Val Val Val Ser Met Leu Tyr Ser Ile Ile Phe Ser
200 20 25 30
201 aac gat gtt aaa gag tcc agc tat acg gga gca att ttt aag ggg agc 144
202 Asn Asp Val Lys Ala Ser Ser Tyr Ala Gly Ala Ile Phe Lys Gly Ser
203 35 40 45
204 ggc tgt atc atg gac agg aat tgg ttt ggt caa ttt ggg agt tgc gat 192
205 Gly Cys Ile Met Asp Arg Asn Ser Phe Ala Gln Phe Gly Ser Cys Asp
206 50 55 60
207 att cca aag cat gta gcc gag tcc atc act aag gtt gcc acc aaa gag 240
208 Ile Pro Lys His Val Ala Glu Ser Ile Thr Lys Val Ala Thr Lys Glu
209 65 70 75 80
210 cac gat gtt gac ata atg gta aaa agg ggt gaa gtg acc gtt cgt gtt 288
211 His Asp Val Asp Ile Met Val Lys Arg Gly Glu Val Thr Val Arg Val
212 85 90 95
213 gtg aat cta acc gaa act att ttt ata ata tta tct aga ttg ttt aat 336
214 Val Thr Leu Thr Glu Thr Ile Phe Ile Ile Leu Ser Arg Leu Phe Gly
215 100 105 110
216 tta gat gat ttt ttg ttc atg ata tct tta atg tct ata gtt tgg ttt 384
217 Leu Asp Asp Phe Leu Phe Met Ile Cys Leu Met Ser Ile Val Trp Phe
218 115 120 125
219 tgg tat cat aca taa 399
220 Trp Tyr His Arg *
221 130

```

232 <210> SEQ ID NO: 6

233 <211> LENGTH: 132

234 <212> TYPE: PRN

235 <213> ORGANISM: Artificial Sequence

237 <220> FEATURE:

238 <221> OTHER INFORMATION: genetically modified TGE-3 viral sequence

240 <400> SEQUENCE: C

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241 Met Val Leu Val Val Lys Val Asp Leu Ser Asn Ile Val Leu Tyr Ile
242 1 5 10 15
243 Val Ala Gly Cys Val Val Val Ser Met Leu Tyr Ser Phe Ile Phe Ser
244 20 25 30
245 Asn Asp Val Lys Ala Ser Ser Tyr Ala Gly Ala Ile Ile Lys Gly Ser
246 35 40 45
247 Gly Cys Ile Met Asp Arg Asn Ser Phe Ala Gln Phe Gly Ser Lys Asp
248 50 55 60
249 Ile Ile Lys His Val Ala Thr Ser Ile Thr Lys Val Ala Thr Lys Glu
250 65 70 75 80

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,905

DATE: 02/11/2003
TIME: 14:04:13

Input File : A:\SEQLISTVANM190001APC.TXT

Output Set : N:\CRF4\02112003\I743905.raw

```

181 His Asp Val Asp Ile Met Val Lys Arg Gly His Val Thr Val Arg Val
182      85      90      95
183 Val Thr Leu Thr Glu Thr Ile Phe Ile Ile Leu Ser Arg Leu Phe Gly
184      100      105      110
185 Leu Asp Asp Phe Leu Phe Met Ile Cys Leu Met Ser Ile Val Trp Phe
186      115      120      125
187 Trp Tyr His Arg
188      130

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/743,905

DATE: 02/11/2006

TIME: 14:03:12

Input Set: A:\SEQLISTVANM190001APC.TXT

Output Set: N:\CRF4\02112003\I743905.raw

L:15 M:271 W: Current Filing Date differs, Replaced Current Filing Date
L:35 M:261 W: Numeric Fields not Ordered, <271> Sort in ascending order!
L:36 M:166 W: Mandatory Feature missing, <12> Tag not found for SEQ ID#:
L:111 M:161 W: Numeric Fields not Ordered, <111> Sort in ascending order!
L:116 M:166 W: Mandatory Feature missing, <12> Tag not found for SEQ ID#:
L:141 M:161 W: Numeric Fields not Ordered, <141> Sort in ascending order!
L:194 M:166 W: Mandatory Feature missing, <22> Tag not found for SEQ ID#: